# 2017 California Public Utilities Commission Annual AB-1338 Report to the Legislature on Trusts and Entities Created by the CPUC

**February 1, 2018** 

### Contents

ASSEMBLY BILL 1338 (2008)
ENTITIES OR PROGRAMS ESTABLISHED BY THE CALIFORNIA PUBLIC UTILITIES COMMISSION4
A. THE PACIFIC FOREST AND WATERSHED LANDS STEWARDSHIP COUNCIL4
B. THE CALIFORNIA CLEAN ENERGY FUND11
C. THE CALIFORNIA EMERGING TECHNOLOGY FUND16
D. THE CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING23
E. 21st CENTURY ENERGY SYSTEMS – RESEARCH AND DEVELOPMENT AGREEMENT31
F. THE DIABLO CANYON INDEPENDENT SAFETY COMMITTEE33
G. NUCLEAR DECOMMISSIONING TRUSTS34
H. ELECTRIC PROGRAM INVESTMENT CHARGE (EPIC)38
APPENDICES and EXHIBITS41
Appendix 1.1 Pacific Forest and Watershed Lands Stewardship Council41
Appendix 1.2 Pacific Forest and Watershed Lands Stewardship Council45
Exhibit 2.1 California Clean Energy Fund (CalCEF Ventures)46
Exhibit 2.2 California Clean Energy Fund (CalCEF Ventures)47
Appendix 3.1 Finance Pilot Budget with CAEATFA Expenditures (September 2014 through June 30, 2017) <sup>1</sup> 48

#### ASSEMBLY BILL 1338 (Huffman, 2008)

This legislative report is submitted by the California Public Utilities Commission (CPUC) to the Legislature pursuant to AB 1338 passed in September 2008. This law requires the California Public Utilities Commission (CPUC) to report to the Legislature certain information concerning entities or programs created by order of the CPUC. On January 1, 2016, Section 326.5 of the Public Utilities Code was amended and renumbered to P.U. Code 910.4. <sup>1</sup>

#### 910.4.

By February 1 of each year, the commission shall report to the Joint Legislative Budget Committee and appropriate fiscal and policy committees of the Legislature, on all sources and amounts of funding and actual and proposed expenditures, both in the two prior fiscal years and for the proposed fiscal year, including any costs to ratepayers, related to both of the following:

- (a) Entities or programs established by the commission by order, decision, motion, settlement, or other action, including, but not limited to, the California Clean Energy Fund, the California Emerging Technology Fund, and the Pacific Forest and Watershed Lands Stewardship Council. The report shall contain descriptions of relevant issues, including, but not limited to, all of the following:
  - (1) Any governance structure established for an entity or program.
  - (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.
  - (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.
  - (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.
  - (5) The public process and oversight governing the entity or program's activities.
- (b) Entities or programs established by the commission, other than those expressly authorized by statute, under the following sections:
  - (1) Section 379.6.
  - (2) Section 399.8.
  - (3) Section 739.1.
  - (4) Section 2790.
  - (5) Section 2851.

<sup>&</sup>lt;sup>1</sup> SB 697 (Hertzberg, 2015); SB 1222 (Hertzberg, 2016).

## ENTITIES OR PROGRAMS ESTABLISHED BY THE CALIFORNIA PUBLIC UTILITIES COMMISSION

#### A. THE PACIFIC FOREST AND WATERSHED LANDS STEWARDSHIP COUNCIL

#### **BACKGROUND**

The Pacific Forest and Watershed Lands Stewardship Council (Stewardship Council) was formed as a result of the California Public Utilities Commission (CPUC) Decision 03-12-035 dated December 18, 2003: "Opinion Modifying the Proposed Settlement Agreement of Pacific Gas & Electric Company, PG&E Corporation and the Commission Staff, and Approving the Modified Settlement Agreement". Paragraph 6 of Section VI, Subsection C specified that a total of \$100 million would be provided to the Stewardship Council for The Land Conservation Commitment and the Environmental Opportunity for Urban Youth. Paragraph 6 further stipulated that funding would be paid over 10 years, to be recovered in retail rates. The Stewardship Council does not receive any additional sources of funding at this time.

The Stewardship Council's mission is to protect and enhance watershed lands and uses, and invest in efforts to improve the lives of young Californians through connections with the outdoors. The Stewardship Council has two goals: (1) to ensure that over 140,000 acres of California's pristine watershed lands are conserved for the public good through the Land Conservation Program, and (2) to invest in outdoor programs that serve young people residing in the PG&E service area through the Youth Investment Program.

The Stewardship Council Board of Directors is comprised of appointees from state and federal agencies, including the CPUC, water districts, tribal and rural interests, forest and farm industry groups, conservation organizations, and PG&E. All decisions of the Board of Directors are made by consensus.

The Stewardship Council welcomes Heidi Krolick as the new Executive Director. Heidi holds a Master's degree in Parks, Recreation and Tourism Management from Lincoln University in New Zealand and Bachelor's degrees in Environmental Studies and Geography from the University of California, Santa Barbara. Heidi has replaced Allene Zanger who retired at the end of June, 2017. Heidi will be overseeing the operations of the organization based in Roseville, CA.

#### PARTIAL LIST OF LAND CONSERVATION PROGRAM ACCOMPLISHMENTS

- Following a comprehensive public outreach effort, the Stewardship Council Board of Directors adopted Volumes I and II of the Land Conservation Plan (LCP) on December
   28, 2007. The LCP is a comprehensive framework to guide the Stewardship Council's conservation work.
- The Stewardship Council Board of Directors has selected 13 entities as recipients of fee title donations of PG&E Watershed Lands. Fee title conveyance transactions are moving forward on

- approximately 38,500 acres. The future landowners are federal, state, and local public agencies, nonprofit conservation organizations, and Native American entities.
- To date, the Board of Directors has selected 12 qualified organizations to hold conservation easements that will protect the Beneficial Public Values (BPVs) of PG&E's Watershed Lands.
- As of November 2017, the Board has approved Land Conservation and Conveyance Plans
   ("LCCPs") for 53 fee donations and/or conservation easement or conservation covenant
   transactions. These plans describe how the proposed transactions satisfy the requirements of the
   Settlement Agreement and Stipulation on over 46,000 acres.
- As of October 2017, a total of 23 transactions have closed escrow.
- Fee title to eleven properties totaling 7,990 acres have been conveyed following approval of the transaction by the California Public Utilities Commission:
  - 240 acres of lands at Kennedy Meadows, located in Tuolumne County, were donated to the County of Tuolumne on November 20, 2013. Concurrently, a conservation easement being held by the Mother Lode Land Trust was recorded that will ensure the beneficial public values of those lands are protected in perpetuity.
  - 151 acres of lands in the Deer Creek planning unit, located in Tehama County, were donated to the United States Forest Service on October 9, 2014, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - 41 acres at the Narrows planning unit, located in Nevada County, were donated to the
    University of California for management by its Sierra Foothill Research and Extension Center on
    January 29, 2015. The conservation easement on that property is held by the Bear Yuba Land
    Trust.
  - 907 acres of lands at the Lower Bear Area planning unit, located in El Dorado County, were
    donated to the United States Forest Service on December 10, 2015, along with a conservation
    covenant that is being held by the Sierra Nevada Conservancy.
  - 1,459 acres at the Lake Spaulding (Camp 19) planning unit, located in Nevada County, were donated to the University of California Center for Forestry on December 14, 2016. Concurrently, a conservation easement being held by the Bear Yuba Land Trust was recorded.
  - 98 acres at the North Fork Mokelumne planning unit, located in Calaveras and Amador Counties, were donated to the United States Forest Service on December 21, 2016, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - 167 acres of lands at the Wishon Reservoir planning unit, located in Fresno County, were donated to the United States Forest Service on July 12, 2016, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - 16 acres of lands at the Lower Drum planning unit, located in Placer County, were donated to the Auburn Area Recreation and Park District on June 10, 2016. Concurrently, a conservation easement being held by the Place Land Trust was recorded.
  - 10 acres of lands at the Lower Drum (Pinecroft Reserve) planning unit, located in Placer County, were donated to Placer County on March 23, 2017. Concurrently, a conservation easement being held by the Place Land Trust was recorded.

- 410 acres of land at the Blue Lakes planning unit, located in Alpine County, were donated to the United States Forest Service on October 2, 2017 along with a conservation covenant that is being held by the Sierra Nevada Conservancy. The lands run along Deer Creek and surrounding Upper Blue Lake.
- 4,491 acres at McArthur Swamp located in Shasta County were donated to Fall River RCD on October 18, 2017. Ducks Unlimited holds the conservation easement.
- Sixteen conservation easements have been recorded on 7,061 acres retained by PG&E at the Doyle Springs, Iron Canyon, Kern River, Narrows, Lower Bear Area, Middle Fork Stanislaus River, Merced River, Lower Drum, Fordyce Lake, Kilarc Reservoir, and Wishon Reservoir planning units.
- In 2012, the Stewardship Council launched its enhancement program, which will result in grants being awarded to projects that enhance the BPVs of the Watershed Lands and promote partnerships between the landowner, the conservation easement holder, local communities, youth, and other stakeholders. To date, several grants have been awarded for planning and feasibility studies, biological surveys, and resource protection projects. For example, the Stewardship Council awarded approximately \$1.4 million to a project being implemented by Cal Trout and the Pit River Tribe to restore 1.5 miles of in-stream wild trout habitat and native vegetation along Hat Creek in Shasta County. Grant funds were used to build new trails, a pedestrian bridge, and scenic picnic area; enhance fishing opportunities; and protect several historic sites with new fencing, landscaping, and signage. Pit River Tribe youth and tribal members are helping to implement this project. The Stewardship Council awarded \$550,000 to the Spring Rivers Foundation to restore a meadow that will support the Shasta crayfish, an endangered species. The project is restoring and re-watering approximately 650 feet of channel in Rock Creek in Shasta County to create habitat for the crayfish, which will be relocated from nearby existing habitat. The project is providing fieldwork experience to youth and young adults as part of high school and university curriculum. In the summer of 2017, the Stewardship Council initiated a request for enhancement concept proposals, and anticipates granting up to an additional \$2.4 million to projects that enhance the BPVs of the Watershed Lands and promote partnerships.

#### YOUTH INVESTMENT PROGRAM ACCOMPLISHMENTS

In 2016, using Stewardship Council funding, Youth Outside awarded multi-year grants to 19 organizations totaling \$820,000. These grants serve youth in several regions of PG&E's service area, providing transformational outdoor education and open space experiences. Additionally, Youth Outside supported ten partner agencies by granting a total of \$30,000 for program delivery of the Outdoor Education Institute (OEI).

• Youth Outside awarded a \$500,000 infrastructure grant to the Trust for Public Land in 2016 to help complete the restoration of Hilltop Park in the Bayview neighborhood of San Francisco.

The \$6.7 million renovation project is complete and the park reopened to the public on December 3, 2016.

- A grant from the David and Lucile Packard Foundation and the Morgan Family Foundation allowed Youth Outside to facilitate a Cultural Relevancy Series for environmental education organizations of the South Bay.
- The second cohort of Rising Leaders Fellowship launched in April 2016. The Fellowship supports the professional development of diverse, rising leaders who currently hold an entry to mid-level positions within an outdoor programming or outdoor education organization. A cohort of ten participants successfully completed the program in December 2016.
- Youth Outside ended the 2016 year with 100% Board giving and a growing individual donor base. Additional support came from San Francisco Foundation, the Clarence E. Heller Charitable Foundation and the Martin Foundation.

#### ANNUAL REPORT

The Stewardship Council has established an independent Audit Committee which oversees a full financial audit of the organization's financial statements and internal controls processes. This annual audit is available to the public via the Stewardship Council's website, as is the organization's IRS form 990: Return of Private Foundation. These reports can be found at:

http://www.stewardshipcouncil.org/public information/financial statements.htm

In addition to supplying the most recently available audit report and tax return, this report outlines the additional information required by the Public Utilities Code Section 910.4.

#### (1) Any governance structure established for an entity or program.

#### a. Articles of Incorporation

http://www.stewardshipcouncil.org/documents/background%20documents/Articles%20of%20Inc orporation Amended%204.30.14.pdf

#### b. Bylaws

http://www.stewardshipcouncil.org/documents/background%20documents/Corporate%20Bylaws\_Amended%204.30.14.pdf

#### c. Settlement Agreement

 $\underline{http://www.stewardshipcouncil.org/documents/background\%20documents/Settlement\%20Agreement.pdf}$ 

#### d. Stipulation Agreement

http://www.stewardshipcouncil.org/documents/background%20documents/Stipulation%20Signe d.pdf

#### e. Policies and Procedures

To be supplied as a separate document as Addendum 1a (available on CD by request).

#### (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.

#### a. Schedule of Employees and Compensation:

A summary of staff salaries and benefits are provided in **Table 1**, a more detailed breakdown of salaries and benefits for the top five highest paid employees is given in **Appendix 1.1**.

**Table 1** - General breakdown of active staff costs for 10 years to Oct 31, 2017.

Year	<b>Gross Pay</b>	Benefits	401K	Total
2008	\$1,104,093	\$197,132	\$28,382	\$1,329,607
2009	\$1,341,280	\$250,658	\$39,568	\$1,631,506
2010	\$1,657,798	\$314,535	\$48,442	\$2,020,775
2011	\$1,590,718	\$304,839	\$47,210	\$1,942,767
2012	\$1,535,781	\$310,901	\$46,193	\$1,892,875
2013	\$1,171,951	\$231,036	\$42,868	\$1,445,855
2014	\$1,114,727	\$220,195	\$41,682	\$1,376,604
2015	\$1,057,086	\$205,453	\$39,244	\$1,301,783
2016	\$ 904,614	\$191,757	\$36,688	\$1,127,910
2017 YTD	\$ 638,483	\$164,957	\$19,563	\$ 868,003

## (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.

No State staff is currently or ever has been loaned to this organization.

## (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.

a. Under the Settlement Agreement, Section 17(c), PG&E is obligated to fund the Stewardship Council annually over a ten-year period and is authorized by the Commission to recover these payments in rates. PG&E made its tenth and final installment payment to the Stewardship Council in January 2013. However, the Commission is not a party to any of the contracts entered into by the Stewardship Council, except that it is a third party beneficiary to the Major Grant Agreement that the Stewardship Council entered into with the Foundation for Youth Investment in August 2013. When the Stewardship Council dissolves after it finishes its land conservation program work, the CPUC will have the right to succeed to the Stewardship Council's rights, but not its obligations, under the Major Grant Agreement.

#### b. Schedule of professional fees

#### See Appendix 1.2.

#### (5) The public process and oversight governing the entity or program's activities.

- a. The Stipulation Agreement provides that:
  - 1. "The meetings of the Governing Board [of the Stewardship Council], including meeting minutes, will be public... The Stewardship Council will publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located and will maintain a public web site... Before making decisions regarding the disposition of any individual parcel, the Stewardship Council will provide notice to the Board of Supervisors of the affected county, each affected city, town, and water supply entity, each affected Tribe and/or co-licensee, and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner." (Section 11(c))
  - 2. "The Governing Board will make each decision by consensus" (Section 11(a) "Each member of the Governing Board will report to, and back from, the entity he or she represents before the Governing Board takes any programmatic action . . . in order to ensure that consensus represents the views of that entity." (Section 11(b))
  - 3. "The Stewardship Council will provide semi-annual progress reports to the Commission... Each such report will state (1) actual expenditures and progress achieved towards the stated purpose of the Land Conservation Commitment; (2) unresolved disputes within the Governing Board; and (3) anticipated expenditures and actions during the next reporting period." (Section 14)
- b. The Stewardship Council's corporate bylaws provide as follows:

#### Section 11. Public Notice of Meetings.

- 1. All meetings of the Board, including meeting minutes, shall be public; provided, however, that the Board shall have the authority to undertake a closed meeting in appropriate circumstances. The Board shall publish notice of its meetings in newspapers of general circulation in the affected counties within a reasonable time prior to any meeting and shall maintain a public web site that provides notices of its meetings and copies of all meeting minutes. Upon request, all information available on the web site shall be made available in hard copy to members of the public at cost.
- 2. Before the Board makes any decision regarding any individual parcel of land, the Board shall provide notice to the Board of Supervisors of the affected county, each affected city, town and water supply entity, each affected tribe and/or co-licensee and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner within a reasonable time prior to the meeting at which the Board will make the decision regarding that land.

c. The board-adopted Policies and Procedures include the following:

#### **Public Noticing**

1. The Stewardship Council is required to "publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located..." It is also required by its Bylaws to "publish notice of its meetings in newspapers of general circulation in the affected counties within a reasonable time prior to any meeting..." Staff will be responsible for meeting the letter and spirit of these requirements through an inclusive and comprehensive public outreach effort.

#### Stewardship Council 2017 Public Outreach Activities, Targeted Media Outreach and Noticing

- 1. The Stewardship Council sends e-mails to the stakeholders in its database regarding Land Conservation program updates and information, and announcements for public Stewardship Council board meetings. As of October 1, 2017, the Stewardship Council database included 13,303 individuals and 5,161 organizations (federal, state and local agencies, nonprofits, schools, tribal entities, foundations and for-profit businesses).
- 2. The Stewardship Council mails notifications to neighboring property owners, the Board of Supervisors of the affected county, each affected city, town and water supply entity, and each affected tribe regarding draft Land Conversation and Conveyance Plans (LCCPs) for subject parcels of PG&E Watershed Lands. The notification explains how stakeholders can submit public comments on the draft LCCP. The Stewardship Council also disseminates e-mail notices to stakeholders in its database requesting public comment on the draft LCCPs.
- 3. The Stewardship Council sends news releases announcing public board meetings to a media database, which includes approximately 1,000 media outlet representatives.
- 4. The Stewardship Council pays for legal notices to be printed in local papers, noticing all public board meetings. Notices are printed in newspapers serving populations that are located (a) near the place of each board meeting, and (b) in the geographical areas corresponding to the Watershed Lands that are the subject of a recommendation for the selection of a fee donee or conservation easement holder or a proposed action approving a Land Conservation and Conveyance Plan.
- 5. Logs are maintained for telephone inquiries regarding noticing. If a written correspondence is received, an electronic copy is made and saved. E-mail communication is also saved electronically.
- 6. The Stewardship Council's 2016 annual report is posted to the Council's website, and its availability announced via an email to all stakeholders in our database.

#### **B. THE CALIFORNIA CLEAN ENERGY FUND**

#### **BACKGROUND**

The California Clean Energy Fund (CalCEF) is an independent 501(c)(4) non-profit corporation, doing business as CalCEF Ventures, that was established via the bankruptcy settlement between Pacific Gas and Electric Company (PG&E) and the California Public Utilities Commission (CPUC) with CPUC Decision 03-12-035 in Investigation 02-04-026. The \$30 million granted to CalCEF was distributed by PG&E over five years and derived from shareholders per the terms of the settlement agreement.

CalCEF has a family of entrepreneurial nonprofit organizations focused on the rapid commercialization, deployment and scale up of low-carbon energy technologies. The CalCEF tripartite framework – Ventures, Innovations and Catalyst – identifies market barriers, develops and launches innovative financing solutions to overcome those barriers, and invests in the deployment of those solutions. CalCEF is forging a new model of market, policy and financial innovation to bridge multiple gaps in the development cycle of clean energy technologies.

#### Since 2005 CalCEF has:

- Collaborated with industry leaders to bring new financing solutions to the energy efficiency marketplace;
- Founded the nation's first university center on energy efficiency, at UC Davis;
- Created the first venture capital impact fund;
- Helped form the industry's first multi-investor platform for tax equity investment;
- Launched the industry's first fund to focus on early-stage financing;
- Collaborated with Lawrence Berkeley National Laboratory to launch CalCharge, aimed at developing and deploying new energy-storage technologies; and,
- Entered into a contract with the California Energy Commission to administer and run the California Sustainable Energy Entrepreneur Development (CalSEED) initiative, which awarded 28 grants to early stage clean energy enterprises within its first year of programming.
- Implemented Free Electrons, a global advanced accelerator program for clean energy solutions, as the lead program manager.

As of 2017, all of the settlement funds provided have been spent down and remaining investment returns are not expected to provide a reliable funding stream for the organization's future work or provide any significant windfalls. Other funding sources are being sought. Thus, the California Clean Energy Fund will discontinue its annual report under Assembly Bill 1338.

#### **ANNUAL REPORT**

#### (1) Any governance structure established for an entity or program.

CalCEF Ventures is governed by a board of between 3-15 directors under its Incorporation Charter and Bylaws filed in 2004 and the 2013 amended and restated Bylaws.

a. Articles of Incorporation: Articles of Incorporation, 2004.

b. Bylaws: Restated Bylaws, 2013.

c. Settlement Agreement: http://docs.cpuc.ca.gov/Published/Final\_decision/32687.htm

d. Stipulation Agreement: No stipulation agreement found.

e. Policies and Procedures: Conflict of Interest Policy, 2009.

#### (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.

CalCEF Ventures employees 11 headcount / 9.4 full-time equivalent staff as of October 2017. A summary of staff salaries and benefits supported by the original settlement funds, by year, are provided in **Table 2**. 2016 year-end figures have been corrected and the costs for 2017 are partial and subject to change:

Table 2

	Gross Pay	Benefits	Total
2005	\$175,000	\$1,848	\$176,848
2006	\$145,833	\$3,707	\$149,540
2007	\$210,000	\$5,234	\$215,234
2008	\$166,083	\$6,347	\$172,430
2009	\$175,481	\$11,324	\$186,805
2010	\$205,270	\$16,364	\$221,634
2011	\$225,167	\$17,115	\$242,302
2012	\$245,257	\$13,989	\$259,246
2013	\$376,505	\$16,985	\$393,490
2014	\$117,467	\$6,573	\$124,040
2015	\$110,451	\$6,298	\$116,749
2016	\$206,971	\$30,438	\$237,409
2017 (YTD)	\$186,161	\$23,188	\$209,349

## (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.

Staff are shared across the CalCEF family of organizations but accrued for each organization separately. The amount listed above only pertains to the activities of CalCEF Ventures. No state staff is currently or has ever been loaned to this organization. No staff from other internal organizations is on loan.

## (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.

CalCEF Ventures' initial funding of \$30 million comes from PG&E shareholders. The funding extended over a five-year period as follows: \$2 million in 2004, \$4 million in 2005, \$6 million in 2006, \$8 million in 2007, and \$10 million in 2008. Minor donations from other entities were made and are detailed on Exhibit 2.1. PG&E's role in CalCEF Ventures was limited to providing the \$30 million in funding and in appointing three of the initial board members. Authority for this funding was given in CPUC decision D03-12-035, upon settlement of PG&E's bankruptcy.

CalCEF Ventures invested in new technologies by entering into partnering contracts with certain for profit venture capital partners, of which CalCEF continues to maintain a position in one of those, namely the CalCEF Clean Energy Angel Fund. CalCEF also holds a direct investment in Thetus, a former portfolio company of one of the venture capital funds – the fund has since been dissolved and ownership interest was transferred to CalCEF Ventures. (A detailed list of investments is provided in Exhibit 2.2).

In 2006, CalCEF Ventures made a grant of \$0.5 million to UC Davis for the development of the Energy Efficiency Center, and in 2007 made a second grant of \$0.5 million per the terms of the grant agreement. In 2008 the sister organization CalCEF Innovation was set up with \$0.5 million to address important gaps in public policy regarding motivation of clean energy technology and business solutions, and to pursue needed policy making and public benefit goals. In 2011 and 2012 CalCEF Ventures co-established two new investment vehicles with operating partners: in 2011 Clean Energy Advantage Partners; and, in 2012 Renewable Energy Trust. CalCEF Ventures maintains ownership interest in Clean Energy Advantage Partners. The ownership interest in Renewable Energy Trust was first diluted during the years subsequent to the original investment, as expected, through follow-on funding rounds since the seeding stage and exited in late 2016. In 2012 CalCEF Ventures continued its support of the UC Davis Energy Efficiency Center and provided an additional to \$200,000 grant over the subsequent three years. The investment distribution of funding among the partners and grantees is shown in **Table 3** on the next page.

In September 2016, CalCEF Ventures entered into a contract with the California Energy Commission to administer and operate the California Sustainable Energy Entrepreneur Development (CalSEED) initiative. The program is funded through the Electric Program Investment Charge (EPIC). More details on the program goals can be found inside the Request For Proposal documents for this funding opportunity GFO-15-305 available at: <a href="http://www.energy.ca.gov/contracts/RFP-15-305/">http://www.energy.ca.gov/contracts/RFP-15-305/</a>

The initial funding for CalCEF Ventures has been mostly spent down. The organization is now transitioning to a sustainably financed operating model through a combination of grants, mission-aligned cost reimbursable contracts and certain mission-centric earned income streams.

Table 3

Year of Investment	Investment Partner	Objective	Total Investment/Grant
2005	DFJ Element Clean Energy Fund, LLP	Support companies solving resource constraint problems	\$8 million
2005	Nth Power Clean Energy Fund, LLP	Build relationships that speed the growth of new energy technologies	\$8.5 million
2006	Vantage Point Venture Partners	New Clean Energy Technology Investment	\$8 million
2006	UC Davis	Energy Efficiency Center	\$1 million
2007	CalCEF Clean Angel Fund	Start-up/seed stage investment fund in the clean energy and related technologies markets.	\$1 million
2008	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.5 million
2009	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2010	UC Davis	Energy Efficiency Center	\$0.05 million
2010	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2011	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million
2011	Clean Energy Advantage Partners	Tax equity investment fund that deploys capital for renewable energy projects	\$0.4 million
2011	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2011	UC Davis	Energy Efficiency Center	\$0.05 million
2012	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million
2012	UC Davis	Energy Efficiency Center	\$0.2 million
2012	Renewable Energy Trust	Solar PV investment fund that deploys capital for renewable energy projects.	\$0.65 million
2013	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million

#### (5) The public process and oversight governing the entity or program's activities.

CalCEF Ventures is a non-profit 501(c)(4) corporation not funded through either direct taxation or through utility ratepayers. It has a Board of Directors that provides oversight.

#### C. THE CALIFORNIA EMERGING TECHNOLOGY FUND

#### **BACKGROUND**

The California Emerging Technology Fund (CETF) was established as a non-profit corporation pursuant to orders from the California Public Utilities Commission (CPUC) in approving the mergers of SBC-AT&T and Verizon-MCI in 2005. As a condition of approval of the mergers, AT&T and Verizon were required to contribute to CETF a total of \$60 million over 5 years "for the purpose of achieving ubiquitous access to broadband and advanced services in California, particularly in underserved communities, through the use of emerging technologies by 2010." The funds were transferred by both companies by 2010. These funds have been spent as June 2017.

The CPUC stated that CETF should pursue the goals of expanding adoption and usage of broadband technology in addition to promoting ubiquitous access: "We understand that without computers and computer literacy neither availability nor access will ensure use. It is low use that is at the heart of the digital divide. CETF should consider the possibility of public/private partnerships to develop community broadband access points that provide both."

#### **ANNUAL REPORT**

(1) Any governance structure established for an entity or program.

The CPUC orders specified the initial composition and process for constituting the 12-person CETF Board of Directors: four were to be appointed by the CPUC, four were to be appointed by the companies (three by SBC, of which only one could be an employee, and one by Verizon), and these eight were to appoint the remaining four. Initial appointments were made in April 2006 and the Board was fully constituted by the end of June 2006.

Board membership may be found here: <a href="http://cetfund.org/aboutus/board">http://cetfund.org/aboutus/board</a>

- a. Articles of Incorporation <a href="http://cetfund.org/governance/articles-incorporation">http://cetfund.org/governance/articles-incorporation</a>
- b. Bylaws— http://cetfund.org/governance/bylaws
- c. Settlement Agreement—The decisions authorizing the mergers and the creation of CETF are D.05-11-028 and D.05-11-029.

The CPUC's website devoted to the SBC-AT&T merger is here: http://www.cpuc.ca.gov/PUC/hottopics/2Telco/archive/A0502027.htm

The Decision authorizing the acquisition of MCI by Verizon is here: <a href="http://www.cpuc.ca.gov/PUC/hottopics/2Telco/archive/A0504020.htm">http://www.cpuc.ca.gov/PUC/hottopics/2Telco/archive/A0504020.htm</a>

CETF negotiated Memorandums of Understanding (MOUs) with Frontier and Charter during each company's merger application process at the CPUC. These MOUs were incorporated into the final decisions by the CPUC in both of these proceedings (A15-03-005 and A15-07-009 respectively).

- e. Stipulation Agreement—No Stipulation agreement is given for this entity.
- f. Policies and Procedures—See Attachment A.
- (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.

Schedule of employees with salaries and expenses.

Year	Gross Pay	Benefits	Total*
July 2008-June 2009	\$ 977,577	\$153,427	\$1,131,004
July 2009-June 2010	\$1,126,019	\$241,568	\$1,367,587
July 2010-June 2011	\$1,247,106	\$267,799	\$1,514,905
July 2011-June 2012	\$1,320,427	\$286,904	\$1,607,331
July 2012-June 2013	\$1,429,589	\$322,854	\$1,752,443
July 2013-June 2014	\$1,426,660	\$301,852	\$1,728,512
July 2014-June 2015	\$1,415,026	\$276,202	\$1,691,228
July 2015-June 2016	\$1,167,255	\$224,465	\$1,391,720
July 2016-June 2017	\$1,328,200	\$230,176	\$1,558,376

<sup>\*</sup>These numbers reflect audited financials. Benefits include employer retirement contribution.

(3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.

None. There are no state employees at CETF, nor have there ever been any loaned or transferred state employees.

- (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.
  - a. Schedule of contracts. There are professional contracts and agreements with grantees. The
    contracts are listed below. For the grantees Attachment B contains a list of the completed and current
    grants. CETF 1.0, 2.0 and 3.0 are completed. These numbers are for the contracts in fiscal year July
    2016 June 2017.

Accounting	Total	\$ 80,376
Consortia for Adoption	Total	\$ 15,000
Consortia for Deployment	Total	\$ 15,000
IT Tech Support	Total	\$ 21,840

Legal Counsel Total \$7,249

Plan Administrators Total \$4,974

Printing Total \$52,434

Public Awareness and Education Total \$776,057

School2Home Consultants Total \$304,797

Website Support/Online Grant Services Total \$13,906

- b. Schedule of contracts and source of funding for contracts. Under the mergers of AT&T/SBC and Verizon/MCI approved by the CPUC, both companies are obligated to fund CETF annually over a five-year period for a total of \$60 million. This funding is from the shareholders of each company and not the ratepayers. Both companies have completed their payments. During the 2010 fiscal year CETF was awarded two federal grants from the National Telecommunications Information Agency (NTIA) for a total of \$14.2 million which were completed in FY 2012-2013. The entire \$60 million in seed capital has been spent as of June 2017.
- (5) The public process and oversight governing the entity or program's activities.

CETF is incorporated as a California 501(c)3 non-profit corporation as a public benefit corporation. It has a Board of Directors that provides oversight. CETF was established with shareholder funds from AT&T and Verizon. There were no ratepayer funds in the seed capital that funded CETF.

The California Broadband Council (CBC) which was established to marshal the state's resources to further the policy of increasing broadband network deployment, and eliminating the Digital Divide by expanding broadband accessibility, literacy, adoption, and usage. While CETF President and CEO, Sunne McPeak, is a member of the CBC, CETF has made presentations on policy issues and grant programs to this group.

CETF publishes an annual report describing the grants to date, the metrics, and outcomes of the investments, and detailed financial information. In addition to mailing printed copies CETF distributes an electronic copy to everyone who signed up on the CETF website. All the annual reports are posted on the organization's website at: <a href="http://www.cetfund.org/annualreports">http://www.cetfund.org/annualreports</a>. A copy of the Decade Report 2007-2017 is attached as well Attachment E.

The IRS 990s for the past three years are in Attachment C.

CETF hosts a wide range of public forums during the year, including a meeting with its Expert Advisors, Rural and Urban Consortia, and grantees all designed to provide and solicit information about the grants and future directions.

CETF is required by California law to comply with the Non-Profit Integrity Act of 2004. CETF has established an independent Audit Committee which oversees a full financial audit of the financial statements. All the audits are on the CETF website at: http://www.cetfund.org/aboutus/finances/audit.

- (6) All sources and amounts of funding and actual and proposed expenditures, both in the two prior fiscal years, and for the proposed fiscal year, including any costs to ratepayers.
  - a. Sources and amounts of funding. Under the mergers of AT&T/SBC and Verizon/MCI approved by the CPUC, both companies were obligated to fund CETF annually over a five year period for a total of \$60 million. This funding is from each company's shareholders and not the ratepayers and is paid in full. During the FY 2010 CETF was awarded two federal grants from the NTIA for a total of \$14.2 million, which were completed in FY 2012-2013.
  - b. Based on the MOUs with Frontier and Charter, there are no funds from Frontier to CETF operations. All funds from Frontier, \$1,025,000 thus far, are provided to cover grants for non-profits organizations and grantee expenses. Charter is obligated to provide \$6,500,000 each year over the next five years. Charter has provided \$6.5 million in this fiscal year.
  - c. Actual and proposed expenditures. The audit financial statements are available at the <a href="http://www.cetfund.org/aboutus/finances/audit">http://www.cetfund.org/aboutus/finances/audit</a> for the past 3 fiscal years. The budget (projected expenses) for the current fiscal year is Attachment D. It includes an approved budget for School2Home of \$2,250,000 in additional program-grant expenditures.
  - d. Costs to ratepayers. None of the costs are charged to ratepayers.

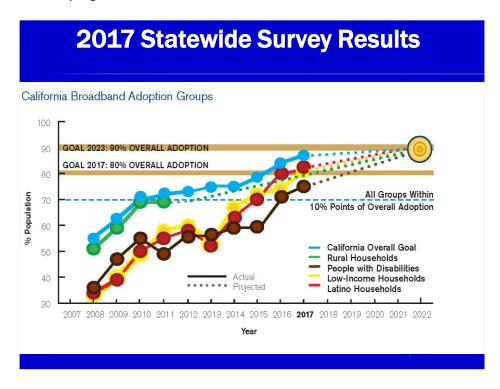
#### **Quick Facts**

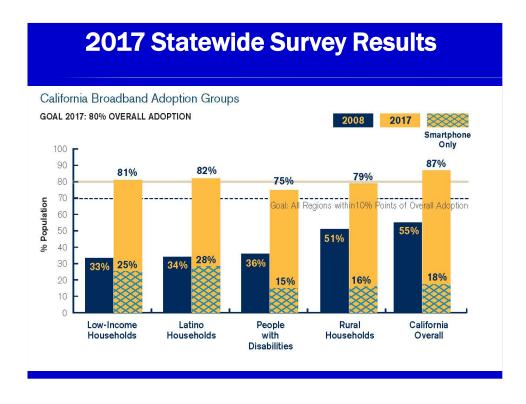
- Contributions from AT&T and Verizon were completed as of December 2010, \$60,000,000.
- 2. Grants approved from the beginning of CETF through June 2017 total \$30.4 million of which \$1.4 million are an accrued liability, which is represent commitments under contract that a grantee had not spent as of June 30 2017.

#### Major Highlights and Accomplishments from 2016 - 2017

- 1. Managed \$30.4 million in more than 100 Grant Agreements, of which 98 are now complete. Final Reports are posted at: <a href="http://www.cetfund.org/investments/portfolio">http://www.cetfund.org/investments/portfolio</a> and can be accessed by clicking the group's names.
- 2. Maintained or exceeded goal of 4-fold leveraging (3:1 match) of seed capital.
- 3. Connected more than 30,000 low-incomes households through grantees work in CETF 3.0.
- 4. Led and managed implementation of School2Home in 35 schools in 12 districts with 600 teachers for 14,000 students and their parents in high-poverty communities.

- 5. Worked with 5 energy utilities and reached agreement with 2 Sempra companies to develop pilots SDG&E and SCG to get their low-income customers online leveraging the success of the model Partnership with the Sacramento Municipal Utility District for sustainable adoption and increasing Digital Literacy among low-income customer base.
- 6. Secured bi-partisan support to pass AB1665, the Internet for All Now Act, to provide \$330 million in additional funds for deployment and a new account for adoption.
- 7. Enabled meetings between housing orgs and ISPs across the state to reach agreements about servicing residents in affordable housing developments. Participants have included: Mutual Housing, New Economics for Women, County of San Bernardino Community Development and Housing Agency, Oldtimers Housing Development Corporation, City Heights Community Development Corporation, and Eden Housing along with Cox, Comcast, Frontier, AT&T and Spectrum.
- 8. Launched the Frontier Partnership to achieve 50,000 adoptions and awarded grants to 12 organizations for \$1.5 million which have accomplished more than 2,000 adoptions.
- Launched and awarded four Charter funded grants, "Access Broadband Connect" for a total of \$868,800.
   See quarterly application, <a href="http://www.cetfund.org/www.cetfund.org/Investments/Grant Opportunities/2017 Grant Opportunity/S">http://www.cetfund.org/www.cetfund.org/Investments/Grant Opportunities/2017 Grant Opportunity/S</a>
   <a href="https://www.cetfund.org/investments/Grant Opportunities/2017 Grant Opportunity/S">http://www.cetfund.org/www.cetfund.org/Investments/Grant Opportunities/2017 Grant Opportunity/S</a>
   <a href="https://www.cetfund.org/investments/Grant">https://www.cetfund.org/investments/Grant Opportunities/Grant O
- 10. Released 10<sup>th</sup> Annual Statewide Survey on broadband adoption in partnership with Intergovernmental Governmental Studies at U.C. Berkeley in June 2017. The first chart below shows progress overtime and second show the progress from 2008 to 2017.





#### Highlights from 10 Years of Achievement in Closing the Digital Divide

- 1. Successfully implemented the Strategic Action Plan to achieve 97.5% deployment and 84% adoption.
- 2. Developed and sponsored an Annual Survey on Adoption that is cited by others.
- 3. Established Regional Consortia to aggregate demand attracting ISPs.
- 4. Awarded more than \$30M in grants to more than 100 community-based organizations to provide Digital Literacy training to over 800,000 residents and succeeded in getting more than 250,000 low-income residential households online.
- 5. Secured Executive Order on Digital Literacy to advance ICT.
- 6. Developed and manage School2Home.
- 7. Established the California Telehealth Network.
- 8. Launched Smart Housing that forged new policies and programs.
- 9. Published seminal reports such as "broadband as a green strategy".
- 10. Secured \$215 million for CASF and secured an additional \$330 million with the passage of the Internet for All Now Act (\$330M CASF).

- 11. Convened Local Government Roundtables with the California State Association of Counties, the Rural County Representatives of California, and the League of California Cities to build civic leaders capacity about broadband.
- 12. Secured major public benefits in corporate consolidations.

Please feel free to contact Sunne Wright McPeak or Susan E. Walters at 415-744-2383 if you have questions or need additional information.

#### D. THE CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING

#### **BACKGROUND**

The California Hub for Energy Efficiency Financing (CHEEF) was established through California Public Utilities Commission (CPUC) decision D.13-09-044 (the Decision) dated September 20, 2013. The Decision authorizes energy efficiency (EE) financing pilots that leverage ratepayer funds in an effort to attract a greater amount of private capital to the energy efficiency retrofit market by reducing risk to lenders. The CHEEF was established to manage administrative tasks and create a standardized open market for EE financing.

The Decision authorized a total of up to \$75,244,931 (that includes \$9,344,931 of CHEEF Pilot Reserve) of Investors Owned Utilities (IOUs) funds for the pilots for a two-year period. Acknowledging that the CHEEF may need to be supported by a master servicer, a trustee bank, a contractor manager, a data manager, and a technical advisor, the decision allocated \$5 million of the budget to cover CHEEF administrative costs and \$2 million to cover CHEEF training and outreach for contractors and financial institutions.<sup>2</sup>

The Decision also selected the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), a state agency associated with the California State Treasurer's Office, to administer the functions of the CHEEF. Because CAEATFA is a state agency, the Decision recognized that it would be necessary for CAEATFA to obtain legislative budget authority to perform this function. On July 1, 2014, CAEATFA was granted legislative budget authority to act as the CHEEF through December 2015. Subsequently, the authority was extended on July 1, 2015 and most recently, it was extended on July 1, 2017, for CAEATFA to carry out the services of the CHEEF through June 30, 2018. CAEATFA is currently submitting a budget request to extend this authority to more accurately reflect the currently pilot implementation timetable.

CAEATFA entered into a Memorandum of Agreement (MOA) with the CPUC on July 18, 2014, which is currently extended to June 30, 2020 to administer the CHEEF duties. CAEATFA and the CPUC have a close relationship through which the CPUC reviews and approves CAEATFA's funding and work as described in the Decision and the MOA between the two. The Decision notes that Commission oversight is "critical to protecting the integrity of ratepayer funds allocated to support [energy efficiency] financing programs." Both the Decision and MOA also direct the CPUC and CAEATFA to coordinate and execute education and outreach for the energy efficiency financing pilot programs.

23

<sup>&</sup>lt;sup>2</sup> See Appendix 3.1 for Finance Pilot budget with CAEATFA Expenditures (September 2014 through June 30 2017).

The Decision included a draft implementation plan for the CHEEF with the following tasks:<sup>3</sup>

- 1. Issue competitive solicitations for a Master Servicer (MS), and other technical assistance as needed such as for information technology, data management etc. (The role of the MS is to manage the flow of ratepayer funds and data between the IOUs, CHEEF, and financial institutions (FIs)).
- 2. Create an Information Technology (IT)-driven platform to support the core processes and functions that make on [utility] bill repayment possible and facilitate data collection.
- 3. Develop procedures for various CHEEF responsibilities such as: approval of forms and protocols for data, transfer between utilities and FIs, and development of lender service agreements.
- 4. Develop standards for evaluating FI qualifications and approving FIs for pilot participation.
- 5. Implement Commission-approved protocols for collection of energy and financial data, data sharing, and third party access to aggregated, anonymous data.
- 6. Develop framework for type and frequency of reporting to CHEEF by IOUs and FIs
- 7. Ensure quarterly information reports on pilots' progress by CHEEF to the Commission as requested by the Energy Division.
- 8. Coordinate with existing customer and contractor facing tools such as Energy Upgrade California.
- 9. Provide a mechanism to make minor, mid-course modifications to the pilot programs as needed to better meet the individual objectives of a particular program.

## STATUS AND ACCOMPLISHMENTS FROM CHEEF QUARTERLY REPORT AND PROGRAM STATUS SUMMARY (APRIL1, 2017- JUNE 30, 2017)<sup>4</sup>

CAEATFA launched the first pilot, Residential Energy Efficiency Loan Assistance Program (REEL), enrolling its first loan in July 2016, and is anticipated to have an initial pilot term through July 15, 2018.

As of June 30, 2017 CAEATFA has expended approximately \$3.06 million of \$15.36 million allocated for CHEEF administration, direct implementation, education, outreach, and training for lenders and contractors. This funding covers CAEATFA's expenditures from September 12, 2014 through June 30, 2017. Of the \$3,061,313 expended \$814,589 was used to fund contracts with the Master Servicer (Concord Servicing Corporation) and the Trustee Bank (US Bank). Furthermore, \$56,404 was encumbered for credit enhancement funds reserved for REEL's enrolled loans. As of July 1, 2015,

<sup>&</sup>lt;sup>3</sup> A full length Program Implementation Plan for the financing pilots is available through the EEstats website at:http://eestats.cpuc.ca.gov/EEGA2010Files/SCG/PIP/2013/Clean/8%20SCG%20SW%20Finance%20PIP \_Clean%20Supplemental%20Filing%20Draft\_4.23.pdf.

<sup>&</sup>lt;sup>4</sup> http://www.treasurer.ca.gov/caeatfa/cheef/resources.asp

CAEATFA received extended legislative budget authority to carry out the services of the CHEEF within the initial existing \$7 million budget through June 30, 2017 (FY16-17).

CAEATFA staff re-evaluated its resources and pilot timetable to better identify the necessary resources to complete pilot implementation and to continue carrying out the CHEEF functions without an interruption in services. Subsequently, CAEATFA requested approval of an additional \$8.36 million of the \$9.3 million existing contingency fund for administrative funds and right sizing the number and level of staff resources through fiscal year 2019-2020 from the CPUC. The CPUC approved CAEATFA's funding request and released \$8.36 million of CHEEF reserve funds. Due to CAEATFA's role as a state agency and the state budget schedule, it was required to concurrently submit a legislative budget request and extension consideration and approval of the 2017 budget. CAEATFA worked in coordination with CPUC staff to request Legislative approval of a 2017 budget request to provide CAEATFA with the corresponding reimbursement and expenditure authority beyond June 30, 2017.

#### **ROLES**

#### **Master Servicer**

The Master Servicer plays a key role in the daily administration of the pilots, accepting lender and loan enrollment applications, and processing on-bill repayment transactions. CAEATFA selected Concord Servicing Corporation (Concord) as the Master Servicer, through a competitive solicitation, and entered into a contract on April 23, 2015. Concord subsequently began the mapping and development of the REEL infrastructure process, while concurrently working with the IOUs to define the various business requirements required of the IOU billing systems to enable the flow of funds and data for OBR. The current contract with Concord Servicing Corporation has been extended to the maximum allowable term and expires on December 31, 2017. A new Request for Proposal (RFP) is currently being developed and will be released to select and onboard a new MS before the end of the current contract term.

#### **Trustee Bank**

The trustee holds the ratepayer funds provided by the IOUs to serve as credit enhancements under the various pilot programs. The Department of General Services (DGS) approved a contract with US Bank on March 11, 2015 to act as the trustee bank. US Bank has worked with CAEATFA to establish holding accounts and reservation accounts for each IOUs. As of September 30, 2015 all of the IOUs have transferred credit enhancement funds into their Holding Accounts. The current contract with US Bank is set to expire on December 31, 2017. A new RFP is being developed and will be released to select a new Trustee Bank before the end of the current contract term.

\_

<sup>&</sup>lt;sup>5</sup> Decision 17-03-026 affirmed the CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education, and Outreach Activities issued November 22, 2016.

#### Data Manager

The data manager will receive pilot data from the MS and other energy efficiency finance program administrators to prepare it for public presentation and use. It will also receive project energy usage from the IOUs. The data will be aggregated and anonymized according to the combined standards and regulatory requirements of the IOUs and capital providers. The RFP for this service has been preliminarily drafted but not released; as CAEATFA prioritizes its workload. Concurrently, CAEATFA and its agents will continue to collect the appropriate data to ultimately be transmitted to the data manager when it is under contract.

#### **Contractor Manager**

The contractor manager will enroll and manage participating contractors in the REEL Program, coordinate with the Statewide Financing Marketing, Education, and Outreach Implementer on outreach, and conduct quality control oversight of projects not participating in an IOU rebate/incentive program. The RFP for this service was released in April 2017 and CAEATFA received five proposals submitted through that competitive solicitation. Of the five submittals that were evaluated, three were invited for an interview. It is expected that the selected firm will be under contract by the fourth quarter of 2017.

#### **Secure Flow of Funds**

In CAEATFA's research and outreach to lenders interested in OBR functionality, lenders expressed the need for additional safeguards around their funds as the IOUs remit daily payments designated for participating lenders. CAEATFA, in consultation with these lenders and the banking industry, has explored different options to provide a secure cash flow solution for the OBR program. Under the currently contemplated secure cash flow design, the Master Servicer will open bank accounts required to enable the transfer of customer repayments from utilities to the financial institutions.

#### **Technical Advisor**

Technical Advisors provide expertise to CAEATFA in its development and implementation of the CHEEF pilot programs. From May 2016 to October 2016, Energy Futures Group, Inc. was contracted to provide short-term technical assistance for the research and development of the commercial pilot project eligibility requirements. In December 2016, CAEATFA released a Request for Offer for a higher-value technical assistance contract to continue research and development and implementation assistance for the commercial pilots. Energy Futures Group, Inc. was issued a Purchase Order effective 03/29/2017. Under its implementation agreement with the Investor-Owned Utilities, CAEATFA continues to rely on the ongoing technical support of Harcourt Brown & Carey (HB&C) and anticipates additional assistance from HB&C with regard to on-bill infrastructure implementation. HB&C's expertise and project management assistance has been helpful in providing continuity under the pilots.

#### **ACCOMPLISHMENTS**

Residential Energy Efficiency Loan Assistance Program

The Residential Energy Efficiency Loan (REEL) Assistance Program enrolled its first loan in July 2016. REEL initial pilot term will last through July 15, 2018 and will continue through the pilot evaluation period thereafter. In March of 2017, the CPUC issued Decision 17-03-026 granting CAEATFA the authority to make several of its requested modifications to remove hurdles for pilots' participations and make them more responsive to the marketplace. CAEATFA staff has begun exploring several ways to implement these modifications into the REEL pilot, specifically:

- Simplifying measure eligibility for the program and moving toward a statewide list of eligible energy efficiency measures.
- Adopting a single, statewide Customer Information Service Release form.
- Consolidating lenders' separate loan loss reserve accounts by IOU into a single loan loss reserve account for lenders.

As of June 30, 2017, the REEL pilot program had 25 enrolled loans for the total of \$452,636 comparing to eleven enrolled loans for the total of \$159,577 by the end of the first quarter of 2017.

#### On-Bill Repayment Programs

Several of the Pilot Programs will include On-Bill Repayment (OBR) as a key feature. CAEATFA staff is working with the IOUs and the MS to develop OBR infrastructure. The MS and the IOUs worked independently and in close coordination to build their individual, customized IT systems to accommodate the data exchange. In March 2016, CAEATFA, the MS and the IOUs launched into the planning and testing of the data exchange protocol and the OBR infrastructure. The parties finalized and formally adopted the IOU-MS functionality testing plan and schedule in early June of 2016. From summer of 2016 to fall of 2016, three of the four partner IOUs successfully completed the majority of their scheduled OBR testing. The fourth IOU is scheduled to complete OBR testing during Q3 of 2017. During fall of 2016, CAEATFA collaborated with the IOUs to develop a full catalogue of OBR program features and requirements, and the operational implications of participating in OBR for lenders. On January 31, 2017, CAEATFA held a public workshop, presenting the key OBR infrastructure details, and what prospective lenders need to know about integrating with OBR. The workshop addressed OBR Governance and Agreement Structures & Secure Cash Flow, OBR Eligibility, OBR Enrollment Process, Establishment of the First OBR Loan Charge, OBR Payment Flow, Delinquencies/ Disconnection/ Removal, and Reporting & Data. Further development and testing with the IOUs may be needed depending on the final outcome of key elements such as the Secure Cash Flow.

The development of the lender/master servicer data and funding exchange process has been an area of focused work for CAEATFA and the MS during the spring of 2017. This effort will clarify and streamline the development of the lender/master servicer data and funding exchange, necessary to communicate the processes between Concord, Lenders, Trustee and CAEATFA, through the full life cycle of OBR loans.

The development, clarification and streamlining of the lender-master servicer data exchange processes has been an area of focused work for CAEATFA and the MS during the first half of 2017. The lender master servicer data exchange is the core operational and communications

Platform processes governing interactions between the MS and Lenders through the full life cycle of OBR loans. CAEATFA has also been working to resolve various 'open issues' and research questions involving OBR operational components and processes. Further development and testing with the IOUs may be needed depending on the final outcome of key elements such as the secure cash flow.

#### Commercial and Other CHEEF Pilot Development

CAEATFA continued development of the CHEEF commercial pilots, researching program features and financial structures for small business and large non-residential projects and financing structures best suited for multifamily projects.

CAEATFA will continue to survey potential external stakeholders interested in the non-residential pilots whom include efficiency implementers, contractors and local government agencies at industry events such as trade shows, forums, and direct calls to further refine the proposed structure for the commercial pilots and to identify partnerships and markets where the program can be implemented successfully. Various commercial programs related workshops were held in 2016-2017.

#### Affordable Multifamily Pilot Development

CAEATFA has also been concurrently working to research and develop the Affordable Multifamily Financing Pilot, targeting properties in which at least 50% of the units are restricted to low and moderate income-eligible households (60% AMI). The Affordable Multifamily Financing Pilot features a credit enhancement to help financing entities mitigate risk, and will support loans, leases and energy service agreements. It will be designed to leverage and complement existing efforts to finance affordable multifamily housing and energy efficiency retrofits, and to encourage growth in private market lending.

CAEATFA has anticipated that the Affordable Multifamily Pilot would be the last in the series of pilots to launch. However, with the CPUCs recent modifications to remove the limitation of master-metered units and OBR, CAEATFA will consider whether it may be able to accelerate the development of this pilot. CAEATFA will be able to better evaluate its capacity once its new resources are on-boarded.

More information on the CHEEF Pilot Programs, including proposed program guidelines for public comment, is available on CAEATFA's website at: <a href="www.treasurer.ca.gov/caeatfa/cheef">www.treasurer.ca.gov/caeatfa/cheef</a> and at: <a href="www.thecheef.com">www.thecheef.com</a>.

#### (1) Any governance structure established for an entity or program

A specific governance structure was not created for the CHEEF, however, the Decision clarifies that CAEATFA is required to follow public procurement and rulemaking procedures when contracting for CHEEF-managed services and finalizing rules for programs identified in this decision. Specifically, CAEATFA is bound by Chapter 2 (commencing with section 10290) of Part 2 of Division 2 of the Public Contracts Code, and Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. CAEATFA must submit a budget revision request to the Department of Finance and Joint Legislative Budget Committee to approve staff positions to administer the pilots, as well as the ability to utilize ratepayer funds to cover administrative costs. CAEATFA received budget authority most recently on July 1, 2017, to carry out the services of the CHEEF through June 30, 2018. Additionally, the MOA between CAEATFA and the CPUC was extended to June 30, 2020.

## (2) Any staff or employees hired by or for the entity or program and their salaries and expenses authorized for FY 16-17

State Personnel Classification Limited Term Positions	State Salary + Benefit Range (monthly; includes average benefit)
Staff Services Manager I (D&I)	\$7210-8497
Staff Services Manager I (Compliance)	\$7210-8497
Associate Governmental Program Associate (AGPA) (D&I)	\$6499-7657
Associate Governmental Program Associate (AGPA) (D&I)	\$6499-7657
Associate Governmental Program Associate (AGPA) (D&I)	\$6499-7657
Associate Governmental Program Associate (AGPA) (D&I)	\$6499-7657
Associate Governmental Program Associate (AGPA) (compliance)	\$6499-7657
Office Technician	\$4708-5414
Office Technician	\$4708-5414

CHEEF Administrative E			
	FY 2014-2015	FY2015-2016	FY 2016-17
Salary & Benefits	\$334,435	\$533,001	\$744,596
OE&E	\$306,401	\$711,374	\$1,431,150

## (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses

Other CAEATFA staff may assist with intermittent workload. This assistance is not significant and is not quantifiable at this time.

## (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract

Contract	Amount	Amount Paid (for services through 6/30/2017	Current Contract Term	Funding Source
Memorandum of Agreement between the CPUC & CAEATFA	\$0	NA	Through June 30, 2020	None
Receivables Contract between the four Investor-Owned Utilities and CAEATFA	\$7,000,000 (reimbursement only)	NA	9/01/2014 -6/30/2020	Ratepayer Funds
CAEATFA Contract with Master Servicer (Concord Servicing Corporation)	\$1,500,000	\$990,875	1/24/2015 – 12/31/2017	Ratepayer Funds
CAEATFA Contract with Trustee Bank (US Bank)	\$180,000	\$120,000	1/24/2015 – 12/31/2017	Ratepayer Funds
Technical Assistance – CMAS Service Orders (Energy Futures Group)	\$49,963 \$249,999	\$49,904 \$16,545	(ended 5/24/2017) 2/15/2017 – 2/14/2018	Ratepayer Funds

#### (5) The public process and oversight governing the entity or program's activities

CAEATFA is developing the pilots under state laws regarding public processes and procurement. Regulations are established under the oversight of the Office of Administrative Law, which include establishing the appropriate channels for public input and access. In addition, all contracts are publically noticed and competitively bid under the oversight of the Department of General Services.

CAEATFA's budget and position authority is overseen by the Department of Financing and the Legislature on an annual basis.

#### CAEATFA provides the following reports:

- Quarterly Reports to the CPUC (as required under the Decision and Contract).
- Annual Reports to the State Legislature (Public Resources Code Section 26017).

#### E. 21st CENTURY ENERGY SYSTEMS - RESEARCH AND DEVELOPMENT AGREEMENT

#### **Background**

On December 20, 2012, the California Public Utilities Commission (CPUC) authorized the "21st Century Energy Systems" (CES-21) in Decision (D.)12-12-031. The Decision authorized development of a five-year "Cooperative Research and Development Agreement "(CRADA), between Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) (collectively known as the Joint Utilities) and the Lawrence Livermore National Laboratories (LLNL). The program was subsequently modified by 2013's Budget Trailer Bill, Senate Bill 96.

In 2014, the CPUC approved D.14-03-029, which modifies D.12-12-031 to comply with SB 96. Changes included reducing funding from \$152.19 million to \$35 million over the five-year research period, narrowing the scope of the program to focus only on cybersecurity and grid integration, minimizing the governance structure, and enhancing CPUC and Legislative oversight of the program.

On April 25, 2014 the Joint Utilities filed a joint advice letter containing their proposed cybersecurity and grid integration research and development (R&D) projects, revised under the new program requirements. The CPUC conducted a thorough and collaborative review of the proposals, convening a consensus-building session among the parties to discuss the issues raised, and approved Resolution E-4677 at a CPUC meeting on October 2, 2014. Resolution E-4677 approved, with modifications and additional oversight requirements, the Joint Utilities' proposed cybersecurity and grid integration projects.

#### **Program Overview and 2017 Progress**

The Joint Utilities began implementation in 2015, securing multiple sub-contractors to conduct the work in addition to LLNL. The cybersecurity and grid integration R&D projects are underway and making progress towards their goals.

The cybersecurity project, titled Machine-to-Machine Automated Threat Response (MMATR), has \$33 million in funding and seeks to develop automated response capabilities to protect critical California infrastructure against cyber-attacks. The project attempts to develop and deploy the first automated system for cyber-attack detection and response. If this capability can effectively coordinate physical infrastructure responses to prevent harm in an attack (e.g., by shutting down a substation before it can be harmed or hacked), it would provide extensive benefits to ratepayers. This project expects potential breakthroughs in standards for threats, responses, infrastructure, and processes; a secure approach to management, command, and control of the defenses; a standard, open architecture for distributed threat detection and automatic, localized response that provides a basis for commercially viable prototypes; modeling and simulation tools for cyber defense; and recommended responses to threats and threat categories.

In 2016, the project moved into the physical demonstration and case testing phase, and completed two cycles of development, including the modeling of the destruction of a transformer using

malware-masked Supervisory Control and Data Acquisition communications, and the quantification of the impact of a Denial of Service attack sent from different locations.

In June 2017, the project began modeling and simulating threat scenarios for grid islanding. In December 2017, the project is scheduled to model and simulate threat scenarios for attacks against multiple substations. Energy Division staff was briefed on the project's progress in August 2017 and will continue to monitor the work.

The grid integration project, titled Flexibility Metrics and Standards, studies and recommends planning metrics and standards that explicitly consider operational flexibility. The project has \$2 million in funding and seeks to improve flexibility metrics and thereby improve long term resource planning for California's grid. In particular, this research project targets potential breakthroughs to assess the electric grid's operational flexibility requirements, operating limits of the existing or planned grid to integrate additional amounts of intermittent renewable generation, and additional resources and cost to integrate additional renewable generation.

The Flexibility Metrics project has concluded major portions of its technical research and is nearing its information sharing and coordination phases, and the project managers intend to directly work with stakeholders in the CPUC's main resource planning proceedings to share data and modeling results, run additional tests based on input, and conduct trainings for CPUC staff on the modeling approach. In late 2016, the program administrators informed CPUC staff that the timeline for concluding this project would expand to mid-2017 to align with the current Integrated Resource Planning (IRP) proceeding and its resource modeling efforts. In 2017, this project has successfully completed final analyses, including modeling of the full WECC representation in the SERVM model, a hybrid resource adequacy and production cost model, and has successfully presented preliminary results and recommendations to the project's advisory group in March and June. Administrators of this project presented findings and recommendations to CPUC staff in August 2017.

For more information contact Melicia Charles <u>melicia.charles@cpuc.ca.gov</u> or 415-355-5502, or David Huang <u>david.huang@cpuc.ca.gov</u> or 916-327-6784.

#### F. THE DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

#### **BACKGROUND**

The Diablo Canyon Independent Safety Committee ("DCISC") was established as a part of a settlement agreement entered into in June 1988 between the Division of Ratepayer Advocates of the California Public Utilities Commission ("CPUC"), the Attorney General for the State of California, and Pacific Gas and Electric Company ("PG&E") concerning the operation of the two units of PG&E's Diablo Canyon Nuclear Power Plant ("Diablo Canyon"). The agreement provided that:

"An Independent Safety Committee shall be established consisting of three members, one each appointed by the Governor of the State of California, the Attorney General, and the Chairperson of the California Energy Commission, respectively, serving staggered three-year terms. The Committee shall review Diablo Canyon operations for the purpose of assessing the safety of operations and suggesting any recommendations for safe operations. Neither the Committee nor its members shall have any responsibility or authority for plant operations, and they shall have no authority to direct

PG&E personnel. The Committee shall conform in all respects to applicable federal laws, regulations and Nuclear Regulatory Commission ('NRC') policies."

The committee acts as an advisory body and has no independent budget.

On January 25, 2007, the CPUC approved a modified charter for the Safety Committee in D.07-01-028. Section 1.B of the new charter concerns appointments of Committee members. It states that candidates for the Committee membership shall be selected from those applicants responding to an open request for application and requires the CPUC to provide for public comment on the applicants' qualifications and potential conflicts of interest. Under the modified charter, the President of the CPUC is required to review the applicants' qualifications, experience, and background, including any conflict of interest, together with any public comments, and propose candidates to the appointing authority with knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The CPUC Energy Division is required to prepare and circulate for public comment, and place on the CPUC public agenda a resolution ratifying the CPUC President's selection of candidates.

#### **CURRENT STATUS**

The Governor has reappointed Dr. Per Peterson for the position beginning July 1, 2017. Dr. Peterson's term will end June 30, 2020. The Chair of the California Energy Commission reappointed Dr. Peter Lam for the position which has a term of July 1, 2015 through June 30, 2018. The California Attorney General has reappointed Dr. Robert Budnitz for the position which has a term of July 1, 2016 through June 30, 2019.

#### G. NUCLEAR DECOMMISSIONING TRUSTS

#### **BACKGROUND**

In OII 86, the CPUC conducted an investigation into managing the decommissioning trust funds for California's nuclear power plants. As a result, in D.87-05-062, the CPUC adopted externally managed trusts as the vehicles for accruing decommissioning funds. Two types of funds were established.

- 1. The *Qualified Trust* funds are contributions that qualify for an income tax deduction under Section 468A of the Internal Revenue Service (IRS) Code.
- 2. The *Non-Qualified Trust* funds are those contributions that do not qualify for an income tax deduction.

Each utility has a Committee made up of 5 members who are responsible for directing and managing their nuclear decommissioning trusts. Two of the Committee members are utility affiliated. The three that are not affiliated with the utility are the CPUC-approved members that serve a term of five years. The Committee appoints trustees and investment managers. On November 25, 1987, Resolutions E-3060, E-3048, and E-3057 approved, respectively, San Diego Gas & Electric's (SDG&E), PG&E's, and Edison's (SCE) Master Trust Agreements.

The utilities employ a stable of investment managers and advisors for their decommissioning trusts.

#### **Investment Managers**

#### SDG&E:

- Payden Rygel [Qualified/Fixed income]
- Lazard [Qualified/Fixed income]
- Pimco [Qualified/Fixed income]
- State Street Global Advisors [Qualified/U.S. Equity and International] and [Nonqualified/U.S. Equity]
  - TCW [Qualified/Fixed Income]
  - Northern Trust [Qualified Fixed income] and Non-qualified Fixed income]
  - Western Asset [Qualified Fixed Income]
  - Acadian [Qualified/U.S. Equity]
  - Black Rock [Qualified/Fixed income]
  - Loomis Sayles [Qualified Fixed income]
  - Earnest Partners [Qualified/ U.S. Equity]

#### PG&E:

- Black Rock Financial Management [Qualified trust fixed income]
- NISA Investment Advisors [Qualified trust fixed income]
- State Street Global Advisors [Qualified trust fixed income]
- PanAgora Asset Management [Qualified trust Non-US equities]
- Rhumbline Advisers [Qualified trust U.S. equity]
- \* Earnest Partners [Qualified trust fixed income]
- Mellon Capital [Qualified trust US equity]

#### SCE:

- Schroders [Qualified trust fixed income]
- Black Rock Financial Management [Qualified trust fixed income]
- Alliance Bernstein [Qualified trust fixed income]
- Pan Agora Asset Management [Qualified trust international equity assets]
- Rhumbline Advisers [Qualified trust US equity assets]
- State Street Global Advisors [Qualified/ US equity assets]
- PIMCO [Qualified/non-qualified fixed income assets]

**Table 5** – The Trust Fund balances as of June 30, 2017:

Utility	<b>Nuclear Plant</b>	Fund Balance
PG&E	НВРР 3	\$ 169. Million
PG&E	DCPP 1	\$1,286. Million
PG&E	DCPP 2	\$1,683. Million
SCE	SONGS 1	\$ 331. Million
SCE	SONGS 2	\$1,315. Million
SCE	SONGS 3	\$1,526. Million
SDG&E	SONGS 1	\$ 154. Million
SDG&E	SONGS 2	\$ 407. Million
SDG&E	SONGS 3	\$ 467. Million
SCE	Palo Verde 1	\$ 392. Million
SCE	Palo Verde 2	\$ 401. Million
SCE	Palo Verde 3	\$ 415. Million

#### **Trustee**

Mellon Bank N.A. acts as the trustee for SDG&E, PG&E and SCE Decommissioning Trusts by providing custody, record keeping, accounting, taxation, and reporting services on behalf of the trusts.

The Nuclear Regulatory Commission (NRC) has some basic regulations that must be followed regarding decommissioning. These are:

- 1. Licensees are required to have sufficient funds to decommission the plant. [10 CFR 50.75]. The utilities with nuclear plants file a report every two years with the NRC showing estimated decommissioning costs according to the NRC methodology, and how much money has been set aside for that purpose. The NRC definition of decommissioning is related only to the 'nuclear' portion of the plant. In California, decommissioning also includes restoring the site to its original condition, which includes additional activities and which requires accumulation of more funds.
- 2. After permanent plant shutdown, certain activities may not be performed that would prevent completion of decommissioning [10 CFR 50.82(6)].

In the 2009 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP), the Commission undertook a comprehensive review of the management and administration of these externally managed nuclear decommissioning trust funds for each of the three major investor-owned electric utilities.

In January 2013, the CPUC issued Decision D.13-01-039, which allows for greater flexibility in trust fund management by allowing for increases in the amount of equity investments and lower- rated higher-yield domestic and foreign bonds to increase the overall yield of the decommissioning trust funds. In the course of the NDCTP the CPUC reviews the trust fund levels and any potential adjustments to amounts paid by ratepayers into the trust funds. The

2012 NDCTP was approved by the CPUC D.14-12-082 on December 18, 2014.

Applications for the 2015 NDCTP were filed by the utilities on March 1, 2016. Currently A.16-03-006 is under review for Diablo Canyon 1 and 2 and Humboldt Bay 3. A.16-03-004 for San Onofre 1, 2, and 3 and Palo Verde will begin in early 2017.

#### H. ELECTRIC PROGRAM INVESTMENT CHARGE (EPIC)

#### **Background**

The Electric Program Investment Charge (EPIC) is an energy innovation funding program established under the authority of the California Public Utilities Commission (CPUC) for the benefit of electricity ratepayers. Organized around three program areas, Applied Research and Development (R&D), Technology Demonstration and Deployment (TD&D), and Market Facilitation, EPIC seeks to drive efficient, coordinated investment in new and emerging energy solutions.

EPIC investments are funded under the authorization of the Commission, as established in Decision (D.) 11-12-035 (the Phase 1 EPIC Decision). D.12-05-037 (the Phase 2 EPIC Decision) requires the Commission to conduct a public proceeding every three years to consider EPIC investment plans for coordinated public interest investment in clean energy technologies and approaches. D.12-05-037 directed the California Energy Commission (CEC), San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), and Southern California Edison Company (SCE), as Administrators of the program, to present their investment plans for the triennial program periods for consideration by the Commission. The EPIC program allocates 80% of the EPIC program budget to the CEC to conduct applied R&D, TD&D, and Market Facilitation. The investor-owned utility administrators, PG&E, SCE, and SDG&E (collectively, IOU administrators), administer the remaining 20% of the EPIC budget for TD&D.

#### Program Updates: 2012-2014 (EPIC 1) and 2015-2017 (EPIC 2) Investment Plans

In 2017, all four administrators continued active implementation of their 2012-2014 and 2015-2017 EPIC plans.

Pursuant to D.12-05-037, the Administrators filed their investment plans for 2012-2014 EPIC funds in 2012, and 2015-2017 EPIC funds in 2014. The CPUC approved these investment plans in D.13-11-025 and D.15-04-020, respectively. All EPIC applications were approved, with some additional modifications and implementation requirements. The four EPIC Administrators are currently implementing the wide range of research, development, demonstration, deployment, and market facilitation activities from both EPIC cycles. As of January 1, 2017, 250 (84%) EPIC projects were active, 23 (8%) were on hold, 7 (2%) were canceled, and 19 (6%) were complete. Of those completed, 1 was CEC's, 14 were PG&E's, and 4 were SCE's. Through 2016, IOU administrators collectively spent over \$64 million, roughly 34%, of their EPIC budget. The CEC, on the other hand, spent over \$27 million (30% of budget) on TD&D, over \$27 million (20% of budget) on applied R&D, and over \$2.5 million (4% of budget) on Market Facilitation. For the year 2017, Administrators estimate the completion of 26 projects by the end of the year.

The CEC's 2015-2017 EPIC Investment contains 21 broad "Strategic Objectives," which are in turn made up of "Strategic Initiatives." Across these areas, the CEC will continue to invest in a wide range of activities related to energy efficiency, demand response, renewable and advanced generation, electric vehicles, smart grid, and energy-related environmental research, development, demonstration, and non-technical market facilitation. A total program budget of \$509,603,300 was approved for the 2015-2017 period.

The three utilities also administer a range of projects in TD&D. These TD&D projects fall into the following four investment areas: (1) Renewables and distributed energy resource integration; (2) Grid

modernization and optimization; (3) customer service and enablement; and (4) Cross-cutting/foundational strategies and technologies.

#### **Program Coordination**

The administrators coordinate closely with each other and stakeholders, under the close oversight of the CPUC. Administrators have continued to participate in regular review meetings, conduct joint webinars and workshops, and regularly collaborate on EPIC-related matters through bi-weekly phone calls.

In 2017, the Administrators held nine workshops with input and coordination from Energy Division staff. The topics of these workshops ranged from the 2018-2020 EPIC Investment Portfolio to distributed energy resources to disadvantaged communities. Additionally, the administrators also put on a Fall Innovation Symposium that spotlighted innovation progress in EPIC and connected with key stakeholders, including the CPUC. Energy Division staff has continued to work with the CEC and IOUs to identify areas for knowledge transfer between EPIC research projects and current energy policy proceedings.

#### **Oversight and Reporting**

Each EPIC administrator submits an annual report to the CPUC in February. The CEC also submits its annual EPIC report directly to the Legislature by March 31. Annual reports provide updates on the status of the investment plans, projects, funding levels, results, intellectual property development, and technological breakthroughs. In the 2016 annual reports, each EPIC administrator provided updates on project status, administrator coordination, public engagement, and budget.

#### Projects Between EPIC Triennial Investment Plan Cycles (Advice Letter 5015-E)

In Phase 2 of CPUC Application (A).14-04-034 for the 2015-2017 EPIC Investment Plans, CPUC Decision (D.)15-04-020 authorized the use of a Tier 3 advice letter (AL) process to request approval of new EPIC investments not included in the administrators' previously approved plans between triennial EPIC application cycles. D.15-04-020 found that a Tier 3 AL process afforded adequate due process rights while providing an avenue for the CPUC to review projects that arise between EPIC's triennial application periods.

On February 7, 2017, PG&E filed AL 5015-E seeking CPUC approval of the addition of six new EPIC projects to its 2015-2017 EPIC portfolio. PG&E ultimately withdrew one project prior to the CPUC's resolution of the AL. Through Resolution E-4863, the CPUC approved two projects, one relating to grid modernization and optimization, and another relating to customer service and enablement. Resolution E-4863 rejected three projects based on findings that the proposed project either failed to meet the requisite showings for new projects that arise between EPIC triennial reviews, or that it failed to map to the electricity system. AL 5015-E was the first instance an EPIC administrator proposed the addition of new projects between EPIC triennial cycles.

#### **EPIC Independent Evaluation**

In 2016, the CPUC initiated a public competitive Request for Proposals (RFP) for an independent evaluation of the EPIC program, pursuant to D.12-05-037. The RFP process resulted in the execution of an evaluation contract, which began in September 2016 and concluded in September 2017. The evaluation comprehensively reviewed the EPIC program, its results, and its processes and recommended improvements for future implementation. The evaluation focused on evaluating the program's alignment with legislative and CPUC intent, identifying best practices in research administrations, and assessing the program's satisfaction of key objectives like ratepayer benefits, advancement of energy innovation, and support of key energy goals. Through the course of the evaluation, Energy Division staff consulted with and directed the evaluator to ensure that the evaluation met its intended purpose.

The final evaluation report, published September 8, 2017, established findings and recommendations across seven different categories: program administration; investment planning process; project selection process; project assessment process; project impacts and policy alignment; overarching coordination and collaboration; on-going program evaluation. In the current CPUC proceeding for the 2018-2020 EPIC investment plans, the CPUC, with input from stakeholders, is determining how to implement the recommendations made in the EPIC Independent Evaluation.

For more information contact Melicia Charles (<u>melicia.charles@cpuc.ca.gov</u> or 415-355-5502), or David Huang (<u>david.huang@cpuc.ca.gov</u> or 916-327-6784.)

### **APPENDICES and EXHIBITS**

### Appendix 1.1 Pacific Forest and Watershed Lands Stewardship Council

2017 YTD Schedule of Employee Compensation through October 31, 2017 for Active Employees as of October 31, 2017.

Title	Cross Day	Madical 9 Frings	4011	Total
Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	107,758	16,160	4,078	127,996
Deputy Executive Director	94,824	23,422	3,673	121,919
Director of Land Conservation	97,920	12,153	3,917	113,990
Director of Finance	81,090	28,455	-	109,545
Senior Project Manager	77,537	24,449	3,101	105,088
Other Staff (6)	179,354	60,318	4,794	289,465
Grand Total (11 positions)	638,483	164,957	19,563	868,003

2016 Schedule of Employee Compensation through December 31, 2016 for Active Employees as of December 31, 2016.

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,625	29,484	6,978	214,087
Director of Land Conservation	102,891	13,707	4,116	120,714
Deputy Executive Director	68,349	17,531	1,120	87,000
Director of Finance and Operations	134,929	23,663	4,941	163,533
Senior Project Manager	91,021	31,322	3,641	125,984
Other Staff (6)	329,799	76,050	15,892	416,592
Grand Total (11 positions)	904,614	191,757	36,688	1,127,910

2015 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2015

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	178,125	28,645	7,078	213,848
Director of Land Conservation	176,000	17,700	7,040	200,740
Director of Finance	130,144	22,988	4,939	158,071
Director of Operations	118,200	32,968	4,728	155,896
Other Staff (9 positions)	454,617	103,152	15,459	573,228
Grand Total (13 positions)	1,057,086	205,453	39,244	1,301,783

2014 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2014

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,820	27,627	7,105	212,592
Director of Land Conservation	178,000	17,349	7,100	202,449
Director of Finance	124,200	22,291	4,731	151,222
Operations and HR Manager	119,325	28,550	4,773	155,737
Senior Project Manager	88,476	29,881	3,539	121,896
Other Staff (9 positions)	426,906	94,497	14,434	532,708
Grand Total (14 positions)	1,114,727	220,195	41,682	1,376,604

# 2013 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2013

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,820	26,756	7,104	211,680
Director of Land Conservation	175,662	17,219	6,945	199,826
Director of Finance	119,280	21,783	3,205	144,268
Director of Special Projects	118,118	26,123	4,634	148,875
Operations and HR Manager	112,986	28,550	4,519	146,055
Other Staff (9 positions)	468,085	110,605	16,461	595,151
Grand Total (14 positions)	1,171,951	231,036	42,868	1,445,855

# 2012 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2012

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,498	25,797	7,044	210,339
Director of Land Conservation	164,619	16,973	6,581	188,173
Director of Youth Investment	128,500	26,739	5,120	160,359
Director of Finance (partial year)	9,792	2,436	0	12,227
Director of Special Projects	113,850	22,032	4,554	140,706
Other Staff (17 positions)	941,822	216,654	22,895	1,315,137
Grand Total (22 positions)	1,535,781	310,901	46,193	1,892,875

# 2011 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2011

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	175,000	25,032	6,996	207,028
Director of Land Conservation	158,964	16,866	6,355	182,185
General Counsel	153,600	22,556	3,072	179,228
Director of Youth Investment Deputy Director of Land	127,946	24,723	5,093	157,762
Conservation	108,754	18,111	4,348	131,213

Other Staff (16 positions)	866,454	197,552	21,345	1,085,351
Grand Total (21 positions)	1,590,718	304,839	47,210	1,942,767

2010 Schedule of Employee Compensation for Active Employees Active Employees as of 12/31/2010

	Medical &			
Title	Gross Pay	Fringe	401k	Total
Executive Director	175,000	22,671	7,000	204,671
Director of Land Conservation	153,513	21,727	3,070	178,310
General Counsel	153,801	17,560	6,152	177,512
Director of Youth Investment	125,033	23,093	5,001	153,127
Director of Finance	100,000	17,557	3,667	121,224
Other Staff (16 positions)	950,451	211,928	23,552	1,185,931
Grand Total (21 positions)	1,657,798	314,535	48,442	2,020,775

# 2009 Schedule of Employee Compensation for Active Employees as of 12/31/2009

		Medical &		
Title	Gross Pay	Fringe	401k	Total
Executive Director	153,125	20,795	3,500	177,420
Director of Land Conservation	146,000	20,834	7,790	174,624
General Counsel	147,700	21,180	2,708	171,588
Director of Youth Investment	120,492	20,066	5,373	145,931
Director of Finance	89,216	18,593	3,569	111,377
Other Staff (15 positions)	684,747	149,190	16,629	850,566
Grand Total (20 positions)	1,341,280	250,658	39,568	1,631,506

# 2008 Schedule of Employee Compensation for Active Employees as of 12/31/2008

		Medical &		
Title	Gross Pay	Fringe	401k	Total
Executive Director	181,111	23,302	7,244	211,657
Director of Land Conservation	139,833	18,923	3,553	162,310
General Counsel	139,941	21,410	0	161,351
Director of Youth Investment	113,328	19,055	4,533	136,916
Finance Manager	84,276	16,231	3,208	103,715
Other Staff (10 positions)	446,494	98,211	9,843	554,548
Grand Total (15 positions)	1,104,983	197,132	28,382	1,330,496

# 2007 Schedule of Employee Compensation for Active Employees as of 12/31/2007

	Medical &			
Title	Gross Pay	Fringe	401k	Total
Executive Director	172,323	22,242	6,893	201,457
Director of Youth Investment	96,688	17,378	3,868	117,933
Finance Manager	80,732	15,632	3,229	99,593
Other Staff (8 positions)	266,674	60,585	3,961	331,218
Grand Total (11 positions)	616,416	115,837	17,951	750,202

## **Appendix 1.2 Pacific Forest and Watershed Lands Stewardship Council**

# SCHEDULE OF PROFESSIONAL FEES YTD AS OF 10/31/2017 PRESENTED BY G/L CATEGORY

G/L CATEGORY	TOTAL PAID		
Legal Fees	41,233		
Accounting Fees	38,875		
Graphics & Media Fees	3,736		
Investment Management Fees	15,750		
Professional Services Fees	3,996		
Boundary Surveys	140,380		
Baseline Documentation	31,992		
Land Planning Fees	62,318		
Land Transfer Costs	42,578		
Total Consultant Expense	380,858		

Car

### **Exhibit 2.1 California Clean Energy Fund (CalCEF Ventures)**

### Donors

2004	PG&E	\$2,000,000
2005	Dewey Ballantine LLP	\$20,000
2005	Cooley Goward	\$10,000
2005	PG&E	\$4,050,000
2006	Dewey Ballantine LLP	\$20,000
2006	PG&E	\$6,000,000
2007	Dewey Ballantine LLP	\$20,000
2007	Nth Power Clean Energy Fund LP	\$20,000
2007	DFJ Alta Terra Clean Energy Fund	\$20,000
2007	PG&E	\$8,000,000
2008	PG&E	\$10,000,000

## **Exhibit 2.2 California Clean Energy Fund (CalCEF Ventures)**

CalCEF Ventures investment positions through four venture capital partners.

Status	Investment	Entity	
No longer hold position	2005	CoalTek Inc.	
No longer hold position	2005	Imperium Renewables	
No longer hold position	2005	SpectraSensors Inc.	
No longer hold position	2005	SuperProtonic Inc.	
No longer hold position	2006	Angstrom Power	
No longer hold position	2006	Arxx Corporation	
No longer hold position	2006	Blue Egg Inc.	
No longer hold position	2006	Bright Source Energy Inc.	
No longer hold position	2006	Chemrec AB	
No longer hold position	2006	Cobalt Technologies Inc.	
No longer hold position	2006	Deeya Energy Inc.	
No longer hold position	2006	Fat Spaniel Tech. Inc.	
No longer hold position	2006	Imara Corporation	
No longer hold position	2006	Mascoma Corp.	
No longer hold position	2006	Miartech Inc.	
No longer hold position	2006	Microposite Inc.	
No longer hold position	2006	Microposite Inc.	
No longer hold position	2006	PPT Research Inc.	
No longer hold position	2006	Solar Century	
No longer hold position	2006	Soliant Energy Inc.	
No longer hold position	2006	Synapsense Corp.	
No longer hold position	2006	Tesla Motors Inc.	
Now holds direct interest	2006	Thetus Corp.	
No longer hold position	2007	BioFuelBox Corporation	
No longer hold position	2007	BridgeLux	
No longer hold position	2007	DynaPump Inc.	
No longer hold position	2007	Earthanol Inc.	
No longer hold position	2007	Energex	
No longer hold position	2007	LumaSense LLC.	
No longer hold position	2007	Petra Solar Inc.	
No longer hold position	2007	Premium Power Corp.	
No longer hold position	2007	TerraPass Inc.	
No longer hold position	2007	Think Global AS	
No longer hold position	2007	Tioga Energy Inc.	
No longer hold position	2007	Wasatch Wind Inc.	
No longer hold position	2007	Xerocoat	
No longer hold position	2007	Ze-gen	
No longer hold position	2008	EdenIQ	
No longer hold position	2008	Senergen	
No longer hold position	2009	Allopartis Biotechnologies	
No longer hold position	2009	Lumetric Lighting, Inc.	
No longer hold position	2010	REEL Solar	
Maintain position	2011	Alphabet Energy	
No longer hold position	2012	Boulder Ionics	
No longer hold position	2012	Novatorque, Inc.	

# Appendix 3.1 Finance Pilot Budget with CAEATFA Expenditures (September 2014 through June 30, 2017)<sup>1</sup>

Item	Allocated	Expended/ ncumbered 2	Balance
CHEEF Administration			
Includes Start-Up costs, CHEEF administrative, direct	\$ 13,360,000	\$ 2,740,334	\$ 10,619,666
implementation, and contracting costs ₃			
Subtotal CHEEF Start-Up Costs	\$ <b>13,360,000</b>	\$ 2,740,334	\$ 10,619,666
Marketing, Education, Outreach (MEO)			
Statewide MEO plan	\$ 8,000,000	(TBD)	\$ 8,000,000
CAEATFA outreach and training to financial institutions	\$ 2,000,000	\$ 320,979	\$ 1,679,021
and Contractors			
Subtotal Marketing, Education, and Outreach	\$ 10,000,000	\$ 320,979	\$ 9,679,021 4
Residential pilots			
Residential Energy Efficiency Loan Credit Enhancement	\$ 25,000,000	\$ 56,404	\$ 24,943,596
Funds			
Energy Financing Line Item Charge (Funding to PG&E)	\$ 1,000,000	(TBD)	\$ 1,000,000
Multi-Family	\$ 2,900,000	\$ -	\$ 2,900,000
Subtotal Residential Pilots	\$ 28,900,000	\$ 56,404	\$ 28,843,596
Non-Residential Pilots			
Small business sector OBR with credit enhancement	\$ 14,000,000	\$ -	\$ 14,000,000
Other Non-Credit Enhancement funds	\$ -	\$ -	\$ -
Subtotal Non-Residential Pilots	\$ 14,000,000	\$ -	\$ 14,000,000
Information Technology (IT)			
IT Funding to IOUs 5	\$ 8,000,000	(TBD)	\$ 8,000,000
Subtotal IT Funding to IOUs	\$ 8,000,000	(TBD)	\$ 8,000,000
CHEEF Pilot Reserve			
CHEEF Pilot Reserve 6	\$ 984,931	\$ -	\$ 984,931
Subtotal CHEEF Pilot Reserve	\$ 984,931	\$ -	\$ 984,931
GRAND TOTAL	\$ 75,244,931	\$ 3,117,717	\$ 64,927,214

<sup>\*</sup> Note: Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.

- 1. This table is not a comprehensive representation of the budget. It does not reflect CSE's expenditures related to ME&O, the IOUs expenditures and additional allocation for IT and administration, or other non-CHEEF costs.
- 2. Encumbered refers to the credit enhancement funds for enrolled loans under the Residential Energy Efficiency Loan (REEL) Loan Loss Reserve (LLR).
- Amount of funds allocated to this section includes the additional \$8.36 million that was approved by CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education, and Outreach Activities issued November 22, 2016.
- 4. This amount does not include CSE's expenditures.
- 5. IT funding to IOUs reports only the initial allocation and does not reflect current IOU expenditures.

This amount reflects the remaining balance after the release of funds that was approved by CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education, and Outreach activities issued November 22, 2016.